

Appln No. 10/646,905
Amdt date June 16, 2006
Reply to Office action of March 16, 2006

REMARKS/ARGUMENTS

In the Office action dated March 16, 2006, the Examiner rejected all of the pending claims under either 35 U.S.C. § 102 or under 35 U.S.C. § 103.

Claims 1 - 4, 6 - 8 and 13 - 16 were rejected under 35 U.S.C. § 102(b) as being anticipated by Okubo et al., U.S. Patent No. 5,973,636 (hereafter referred to as "Okubo"). Claims 1, 6 and 13 are independent. Claims 2 - 6 depend on claim 1. Claims 7 and 8 depend on claim 6. Claims 14 - 16 have been canceled.

Claims 5 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Okubo in view of Senio et al., U.S. Patent No. 6,476,755 (hereafter referred to as "Senio") or Marin, U.S. Patent No. 4,935,742 (hereafter referred to as "Marin"). Claim 5 depends on independent claim 1. Claim 9 depends on independent claim 6.

By this Amendment, Applicant has amended independent claims 1, 6 and 13, and canceled claims 14 - 16. Reconsideration and reexamination are hereby requested for claims 1 - 9 and 13 that are now pending in this application.

Amended Independent claim 1

Claim 1 now recites, in part:

"said system includes means for varying a frequency used to perform said time division ON-OFF control, and means for discriminating between a signal component varying in response to the variation of said frequency and a signal component not varying in response to the variation of said frequency" and

"said discriminating means discriminates a signal component varying in response to a variation of modulating skew as a signal component related to a target object, and discriminates a signal component not varying in response to a variation of modulating skew as a signal component not related to a target object."

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Amended Independent claim 6

Claim 6 now recites, in part:

"said system is of a single-antenna type which switches between transmission and reception by time division, and includes means for varying a frequency used for said transmission/reception switching, and means for discriminating between a signal component varying in response to the variation of said frequency and a signal component not varying in response to the variation of said frequency" and

said discriminating means discriminates a signal component varying in response to a variation of modulating skew as a signal component related to a target object, and discriminates a signal component not varying in response to a variation of modulating skew as a signal component not related to a target object."

Amended Independent claim 13

Claim 13 now recites, in part:

said system includes means for varying a pattern of said time division ON-OFF control by switching between the first OFF period and the second OFF period which is longer than the first OFF period, thereby suppressing signal generation due to targets other than a target object by not receiving the reflecting waves during the second OFF period.

Regarding claim 1, the Examiner stated that Okubo discloses, at column 4, lines 26 - 59 and column 8, lines 1 - 31, an FM-CW radar system that includes means for varying a frequency used to perform the time division ON-OF control, and means for discriminating a signal component varying in response to the variation of the frequency, thereby discriminating a signal related to a target object from other signals.

However, in the passage at column 4, lines 25-59, Okubo simply states: "In a preferable embodiment, the radar apparatus may comprise frequency varying means for varying a center

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frequency of said frequency modulated signal in an event that said interfering signal is detected."
See Okubo specifically at column 4, lines 52-56.

In the above description, the frequency varying means varies a center frequency of the frequency modulated signal, but does not vary a frequency used to perform the time division ON-OFF control.

Further, Okubo does not disclose the means for discriminating a signal component varying in response to the variation of the frequency claimed in amended claim 1.

Okubo neither teaches nor suggests "means for varying a frequency used to perform said time division ON-OFF control, and means for discriminating between a signal component varying in response to the variation of said frequency and a signal component not varying in response to the variation of said frequency" as claimed in claim 1.

Accordingly, claim 1 is not anticipated by or obvious in view of Okubo.

Regarding independent claim 6, the Examiner stated that Okubo discloses, at column 4, lines 26 - 59 and column 8, lines 1 - 31, an FM-CW radar system which includes means for varying a frequency used for the transmission/reception switching, and means for discriminating a signal component varying in response to the variation of the frequency, thereby discriminating a signal related to a target object from other signals".

However, the apparatus of Okubo as described above does not disclose means for discriminating between a signal component varying in response to the variation of said frequency and a signal component not varying in response to the variation of said frequency as claimed in amended claim 6. Moreover, Okubo does not teach or suggest that discriminating means discriminates a signal component varying in response to a variation of modulating skew as a signal component related to a target object, and discriminates a signal component not varying in response to a variation of modulating skew as a signal component not related to a target object.

Accordingly, claim 6 is not anticipated by or obvious in view of Okubo.

Regarding claim 13, the Examiner has stated that Okubo discloses, at column 4, lines 26 - 59 and column 8, lines 1 - 31, an FM-CW radar system which includes means for varying a frequency used to perform the time division ON-OFF control, and means for discriminating a

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signal component varying in response to the variation of the frequency, thereby discriminating a signal related to a target object from other signals.

However, amended claim 13 includes means for varying a pattern of said time division ON-OFF control by switching between a first OFF period and a second OFF period which is longer than the first OFF period, thereby suppressing signal generation due to targets other than a target object by not receiving the reflected waves during the second OFF period".

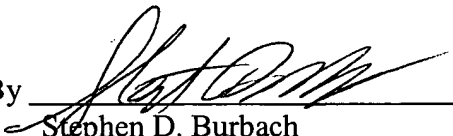
Okubo neither teaches nor suggests the above means. Accordingly, claim 13 is not anticipated by or obvious in view of Okubo.

The claims that depend on the above independent claims also are patentable over the cited references for the reasons set forth above. In addition, these dependent claims are patentable over the cited references for the additional limitations that these claims contain.

CONCLUSION

In view of the above Applicant submits that the claims are patentably distinct over the cited references and that all the objections/rejections to the claims have been overcome. Reconsideration and reexamination of the above application is requested.

Respectfully submitted,
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